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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/739,589	12/15/2000	Steven Teig	SPLX.P0014	3540

23349 7590 01/02/2003

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EXAMINER

THOMPSON, ANNETTE M

ART UNIT	PAPER NUMBER
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2825

DATE MAILED: 01/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/739,589

Applicant(s)

TEIG ET AL.

Examiner

A. M. Thompson

Art Unit

2825

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2000 and 13 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 28-56 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 36-51 is/are allowed.
- 6) ☒ Claim(s) 28, 52 and 54 is/are rejected.
- 7) ☒ Claim(s) 29-35, 53, 55 and 56 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

This application, 09/739,589, with preliminary amendments of 15 December 2000 and 13 February 2002, has been examined. Claims 1-27 are cancelled. Claims 28-56 are added. Claims 28-56 are pending.

#### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 28, 52 and 54** are rejected under 35 U.S.C. 102(b) as being anticipated by Scepanovic, U.S. Patent 5,914,887.

3. Pursuant to claim 28, Scepanovic discloses a placer that places circuit modules in an integrated circuit with a method that comprises selecting a first group of slots; computing a first attribute on a set of interconnect lines; computing a second attribute of the set of interconnect lines; storing the computed attributes in a storage structure (columns 40-42).

4. Pursuant to claim 52, Scepanovic discloses partitioning the IC region into several sub-regions; selecting a net; identifying the set of sub-regions containing the circuit elements of the selected net; and computing a placement cost of the net with the region by using the retrieved attributes (columns 14-16, columns 40-42).

***Allowable Subject Matter***

5. Claims 29-35, 53, 55 and 56 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. Claims 36-51 are allowed.

7. The following is a statement of reasons for the indication of allowable subject matter: In a method of pre-computing costs of placing circuit elements within an integrated circuit, the prior art does not teach defining a partitioning grid having a plurality of slots, defining a connecting graph that models the topology of interconnect and computing multiple attributes for each of the connection graphs.

***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please reference the PTO-892 for a complete listing.

9. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to A.M. Thompson whose telephone number is (703) 305-7441. The Examiner can usually be reached Monday thru Friday from 8:00 a.m. to 5:00 p.m.. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Matthew S. Smith, can be reached on (703) 308-1323.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956 or the Customer Service Center whose telephone number is (703)306-3329.

10. Responses to this action should be mailed to:

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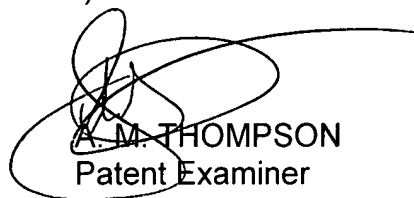
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or faxed to:

(703) 872-9318, (for **OFFICIAL** communications intended for entry)  
(703)872-9319, (for Official **AFTER-FINAL** communications)

Hand-delivered responses should be brought to Crystal Plaza 4, 2021 South Clark  
Place, Arlington, VA., Fourth Floor (Receptionist).



A.M. THOMPSON  
Patent Examiner

December 30, 2002